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ABSTRACT

Given the growing interest in the environment and the mounting crisis in solid waste management, many secondary teachers have been seeking curriculum materials which can help them address these issues with their classes. This document is a collection of 12 multidisciplinary activities which are offered to assist in the education of these students. Each activity in this guide includes objectives, a list of materials, procedures, and suggested followup activities. Activities include: (1) "Is It Trash or Is It Treasure?"; (2) "Values and Technology"; (3) "Waste Not Want Not!"; (4) "Packaging Tells a Tale!"; (5) "Unhappy Shoppers!"; (6) "Technology: Changes in the Home"; (7) "Waste You See is Waste You Get!"; (8) "Make it New Again!"; (9) "More Paper from Paper!"; (10) "Compost: There's Gold in that Garbage"; (11) "It's In the Bag!"; and (12) "Simulation of a Local Waste Management Problem." (CW)

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The New Three Rs Reduce, Reuse, & Recycle!

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Foreword

Since the early 1980s, Operation Waste Watch has been available to the elementary schools in Virginia, providing extra teaching activities and materials in environmental education and especially in the area of solid waste management. During this same period, the Association of Ecology Clubs of Virginia has assisted secondary schools in extracurricular activities.

Given the growing interest in the environment and the mounting crisis in solid waste management, many secondary teachers have asked us recently to provide curriculum materials for them. The following multi-disciplinary activities are our effort to assist in the education of older students in these new three Rs of education.

DEPARTMENT OF WASTE MANAGEMENT

Eleventh Floor, Monroe Building
Richmond, Virginia 23219
804/786-8679

Printed on Recycled Paper

Virginia's Too Good To Waste

Is It Trash or Is It Treasure?

OBJECTIVE: Students will be able to determine from a given list which items are recyclable and which are reusable. Students will be able to determine where and how they can recycle or reuse items they usually throw in the trash. SOL: Science 6.21

MATERIALS:

Trash generated by members of the class on a typical day.

PROCEDURE:

Have members of the class bring in a small bag of trash. There should be a wide range of materials. Class discussion should include food and yard wastes as well. Your group of items will probably resemble the following list:

paper bag	banana peel
plastic bag	apple core
newspaper	candy wrapper
magazine	popsickle stick
paper milk carton	broken toy
plastic milk jug	broken cassette
napkin	old clothes
paper towel	tree branches
other paper	grass clippings
glass jar	book
aluminum can	plastic container
"tin" can	

• What is recycling? How is it different from reuse? (Recycling involves the manufacturing process where the materials are broken down and reconstructed. Aluminum cans and old newspaper are the most common articles which are recycled. Reuse is finding another function for the object in its same form. Using old milk jugs as hanging planters or bird feeders is an example of reuse. Most crafts using objects in a new guise, as Christmas ornaments or pencil holders, are also examples of reuse.

• Have the students identify the items which could be recycled which they brought in. How can things be recycled in school?)

•Have the students list the way their items can be reused.

• Are any members of the class already recycling? Reusing items? Is it hard to do this?

• Where can items be recycled in your community?

• How can local businesses assist people in the reuse of household items? (Class may mention consignment shops for clothing and furniture, Goodwill Industries, Salvation Army, and similar charitable organizations, yard sales.)

• What are the advantages of recycling and reusing? (Conserves natural resources, time, money; generates jobs; reduces dependence on imported materials; cuts down on amount of trash generated.)

• What are the disadvantages of recycling and reusing? (Time consuming, takes up large amounts of space to store, may be hard to sell, change in lifestyle.)

• For Discussion: Considering all the advantages and disadvantages, is it worthwhile to recycle and reuse items we have ordinarily thrown away?

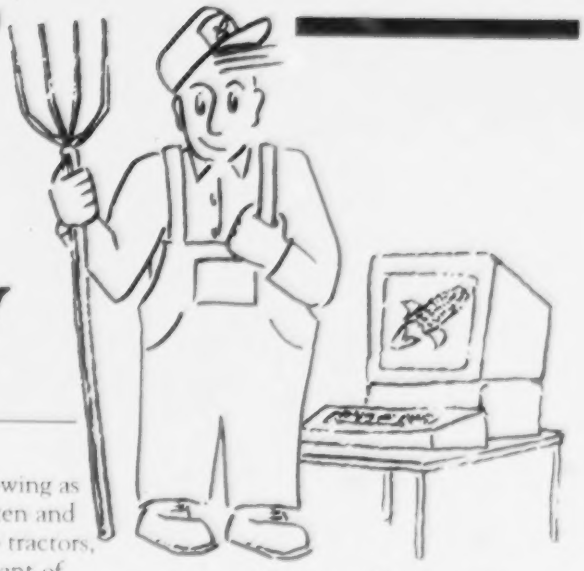
FOLLOWUP ACTIVITIES

Action Project: Collect and reuse paper from school copy machines and classrooms. How much unwrinkled paper used only on one side is thrown away each day? What are some uses for the clean side of all these sheets of paper? (Notepads, library, hall, office, restroom passes, assignment check lists.)

Have someone in the class report on local recycling programs.

Take a trip to a recycling collection center in your town.

Values and Technology



What sets the values of a society? Why are some things worth a great deal to people and not even considered by others? Do values stay constant, or do they shift with the times? What phenomena cause changes in the way we live our lives?

Technology has taken a lot of the time and effort out of daily living. For the most part, this phenomenon has been cheered mightily, but perhaps another look should be taken at some of the ripples caused by technology.

OBJECTIVE: The student will evaluate the effects of technology on lifestyles and our appreciation of resources. SOL: Social Studies 9.9

PROCEDURE:

Groups of students can research through literature, popular media, and oral history, by talking to older people in their families or neighborhoods, to trace the changes to certain lifestyles.

Using a timeline format, show the changes brought about by the growth of technology in the following scenarios starting with the 40s and going through the 80s. A variety of report styles can be used: posters, oral or written presentations.

• The family farm was a staple of the American Way of Life that no one thought would ever disappear from the landscape. Instead, each year marks the disappearance of more multigenerational family farms. Consider the following as you note the changes: oxen and draft horses giving way to tractors, combines, etc.; development of chemical pesticides, herbicides, fertilizers; soil erosion; irrigation; size of herds, fields, and variety of crops; number of hands (or size of family) needed to perform the work. What role has technology played? How would you characterize the effect it has had on farming?

• Contrast the use of hand tools with the use of power tools. What skills are lost with mechanization? What new skills are acquired? Is this a change for the better, why or why not? Consider a wide range of tools, from mowers and clippers to sanders, drills, looms, etc. What are the problems that mechanization has brought?

• Travel has been a staple of the American tradition. Before the automobile and the extensive network of highways, travel was burdensome. What use of our natural resources do we make because of the ease of travel now? What problems have come from the ease of access and the multiplicity of automobiles?

• Entertainment at the turn of the century revolved around neighborhood and family and home-honed skills, with occasional highlights of skilled actors, touring singers and musicians. Now the electronic family entertainment center occupies the time and family room. What has been gained and what lost through these changes? (not only the couch potato syndrome, but also the loss of regional differences should be brought out).

• Reach out and touch someone the telephone company claims. How long does a telephone call last? How long does a letter stay in existence? Of what value to historians are letters?

• Archaeologists dig in middens and gravesites to find artifacts of old civilizations. In the ancient cities of Europe and the Orient, buildings from the middle ages and earlier are still used. Great monuments from the past still inspire our awe. What kinds of things will archaeologists hundreds of years in the future find in our landfills? Will they have to look hard to find materials for their research? Why/Why not? What buildings will they see? How does the class feel about being from the Plastic Age?

FURTHER DISCUSSION

The far ranging effects of a stray coke bottle in a field as depicted in the film *The Gods Must Be Crazy* will give another look at the role of technology and the world we live in.

Office use of computers have transformed the workplace. But have they caused the amount of paper used in the office to diminish? Students could interview their parents, teachers, school office personnel to get some reasons why or why not.

Waste Not Want Not!

OBJECTIVE: Students will recognize that one of the most important ways to solve the solid waste management problem is to cut down on the amount of materials that become solid waste.
SOL: Social Studies 11.8

Americans generate more trash per capita and more trash per total than any other nationality. What are some reasons for this?

What do other countries do instead of throwing away so much? Have different class members research waste disposal habits of other countries. What are some reasons they do not throw away so much?

• During times of shortage, people come up with interesting solutions sometimes known as "making do." Talk to some family members who remember how people overcame shortages during World War II, or the Depression, or other times and report on your findings.

• What are some of the factors that have led us to be the leaders of the "Disposable Society?" elicit: cheap, plentiful resources, great manufacturing capacity, wealth of the populace, reaction to Depression and World War II shortages, planned obsolescence, conspicuous consumption.

• What are some of the leading disposables which are now assisting us to our waste management problems? How can these be replaced? Why have they become so popular?

• Keep a record for a week of the trash you and your family discard at home. What did you discover about what your family throws away? How can you lessen the amount that is thrown away?

• Find a new use for something you were going to throw away. Is this an idea that will catch on?

• Packaging is often considered a major culprit when people talk about the trash we generate. For the next week, keep your discarded packaging separate from the rest of your discards. What is the function of most of the food packaging? What are some other uses for packaging? Is any of it necessary? How much packaging material did you have after one week? Compare that to the rest of your trash. What steps can you take to eliminate excess packaging?

Packaging Tells a Tale!

OBJECTIVE: Students will recognize how the changes in lifestyles over the past fifty years have led to changes in packaging.
SOL: Social Studies 10.5

PROCEDURE:

• Accumulate over the period of a week all the packaging used on the products which you used. Recognize and identify the functions that packaging provides the product which is the useful item you purchased. Sort packaging materials by function; e.g., display, protection, marketing, product identification, convenience.

• Consider the packaging of meat. What does it consist of? How was it done in your grandmother's day? Are there any circumstances when meat is still packaged in the old manner? What changes besides the change in materials does the packaging reflect?

• How did households get their milk when your parents were growing up? List and discuss the impact of the changes brought about by our present milk distribution system.

• How often do families shop for groceries? What differences exist between today's shopping methods and shopping 50 years ago? How do the automobile and the growing number of women working outside the home account for some of these differences? What are other causes?

• Consider the soft drink. What differences in packaging have the last forty years seen? What are the reasons for these changes?

• The corner drug store is another place which has seen a metamorphosis. Fifty years ago the druggist made most of the medications that he sold. Now, most of the tablets and capsules are prepackaged. What are some of the different ways in which drugs are packaged? Why are the blister packs and protective seals prevalent? What other packaging functions are apparent?

• It is often said that the consumer rules the market place. When you look at the packaging trends, how many of these come from changed life styles? What other changes do you foresee? Can we revert to some of the older styles in packaging? Why or why not?

Unhappy Shoppers!

OBJECTIVE: The students will take responsibility for the purchases they make and the waste those generate.
SOL: Social Studies 8.3

PROCEDURE:

Break the class into small groups who go "shopping" in several different kinds of stores. In each case they will be "buying" materials which are over-packaged. The shoppers' purchases either can be created by the groups, or saved up and reused from actual trips they made on their own. Another group will then correct the shopping errors the first group made. Discussion can also focus on avenues the group can follow where there are no present alternatives.

Group I

This group is doing some mall crawling. Several of the shoppers buy earrings which are mounted on foam in plastic boxes. Other purchases include hair brushes in molded plastic on cardboard, nail polish in molded plastic on cardboard, a gift set of many little bottles which comes double boxed and wrapped in plastic, aerosol cologne and hairspray. At the music store they buy a couple of tape cassettes and a compact disc, and two people buy posters. Every purchase in each store generates a plastic bag. Shoppers may modify their purchases, but should cover the gamut of over-packaging.

Group II

This is a hungry group. They go to the neighborhood fast food restaurant. A variety of burgers and sandwiches are ordered, along with french fries, several different types of drinks. They pick up a huge wad of napkins, ketchup, mustard and mayonnaise packets, straws, salt and pepper packets, and the trays for meals to go. They eat in the park across the street from the restaurant.

Group III

Another hungry group, these people go to the grocery store to pick up some lunch and snack items. All the produce has been prepackaged on foam trays with plastic shrinkwrap, and a large variety of fruits and vegetables are purchased. In several cases, fruits or vegetables have been sliced and combined, such as for slaw, melon slices and grapes, etc. The deli section is all self-service, with display packs on hooks. Someone buys cheese slices which are individually wrapped. Someone else buys single serving pudding in a pack of six; someone buys fruit drink in a six pack of little plastic barrels. People also buy chips in single serving size which come several to the package, nabs, bread which is double wrapped and has the brand and product name printed on a band which is between the two wrappers, a variety of cookies and sandwich bags.

FOLLOW UP ACTIVITY

If there are products which the class encounters which they think should be packaged in a less wasteful way, and particularly if there is no alternative which could be purchased, have the class compose letters indicating their concern and suggesting what the manufacturer should do.

Have the class consider other alternatives to their letter writing campaigns.

One reason for the proliferation of plastic bags over paper bags is the cost; plastic bags cost one/sixth of what paper bags cost. Research why this is so. What are other, less wasteful options?

Technology: Changes in the Home.

OBJECTIVE: Students will consider the growth of technology as it has affected the household and understand the relationship of technology and lifestyle.
SOL: Science 8.16

• The growth and development of home refrigeration and the coming of age of the microwave oven have allowed for great changes in food preparation. What other changes has this brought about? What materials are being used in these different packagings? What kind of problems does this give the householder?

• What have been some of the advantages of the uses of synthetic fibers? What disadvantages can you think of? Find examples of many different kinds of natural and synthetic fibers. Can you identify the variety of synthetics and their components? What difficulties can this lead to when the original use is over?

• What did people do before there were:

Scotch tape
toilet bowl cleaner
hairdryer
soda cans
toothpaste tubes
plastic cups
power mowers
disposable diapers
plastic wrap
vacuum cleaner
plastic shampoo bottles
aerosol cans
walkman radio
disposable pens
tin cans?

• In older times, people buried their trash in their backyard. What would happen if the items on the list above were buried? More recently, people would burn their discards. What would be the result of burning these things?

• What items on the list above are you willing to give up? What things do you think must stay? How have these things affected our waste habits? Can any of this material be recycled? reused? how? reduced? What are some environmentally sound solutions to the waste created by this list?

Waste You See is Waste You Get!

OBJECTIVE: Students will examine the materials which comprise their waste, recognize whether or not the material is a renewable or non-renewable resource, and see whether or not it is biodegradable.
SOL: Science 9.4

MATERIALS:

A ten gallon aquarium, soil enough to fill it between one-third and one-half full, a assortment of organic and inorganic waste, trowel.

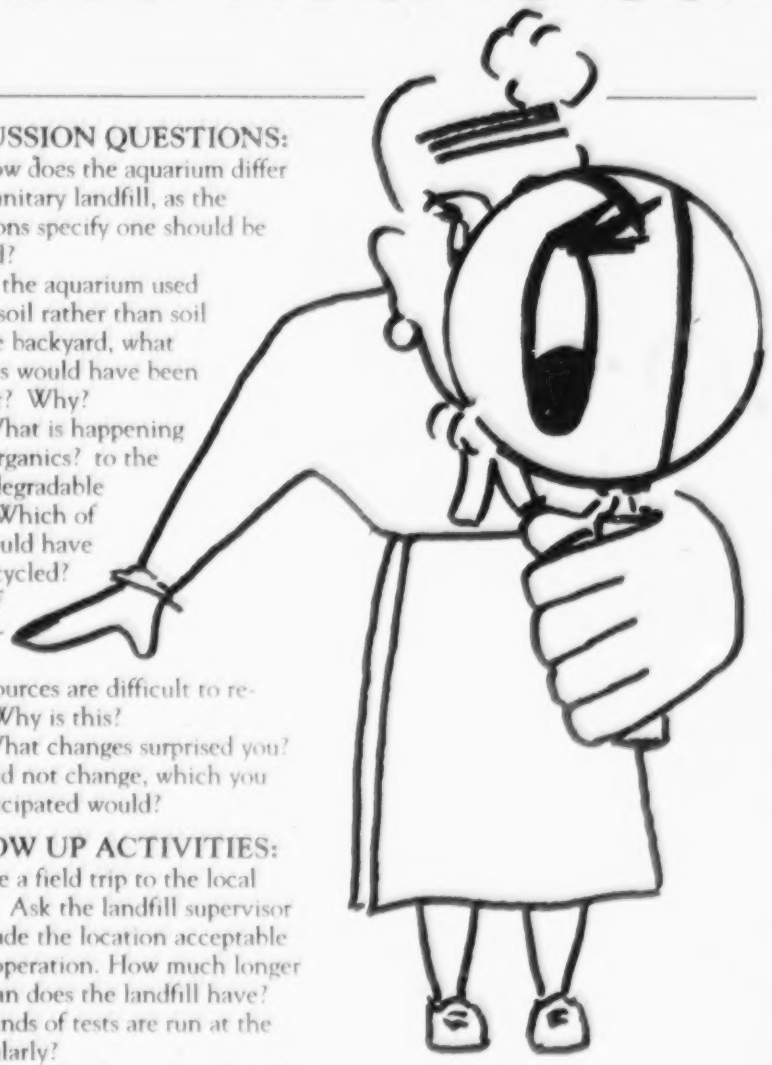
PROCEDURE:

Have the aquarium located where it will get sunshine for part of the day. The waste items should be put into the tank and covered with a couple inches of soil. There should be enough water added to keep the tank damp but not sodden. As each item is put in the tank, the class should identify it as organic, as a renewable resource, as recyclable or not, as biodegradable or not. Class discussion can also speculate on the possible time frame and probable alterations to the properties being disposed of.

Every several days, students should look through the tank and record their observations. The experiment should run at least a month.

DISCUSSION QUESTIONS:

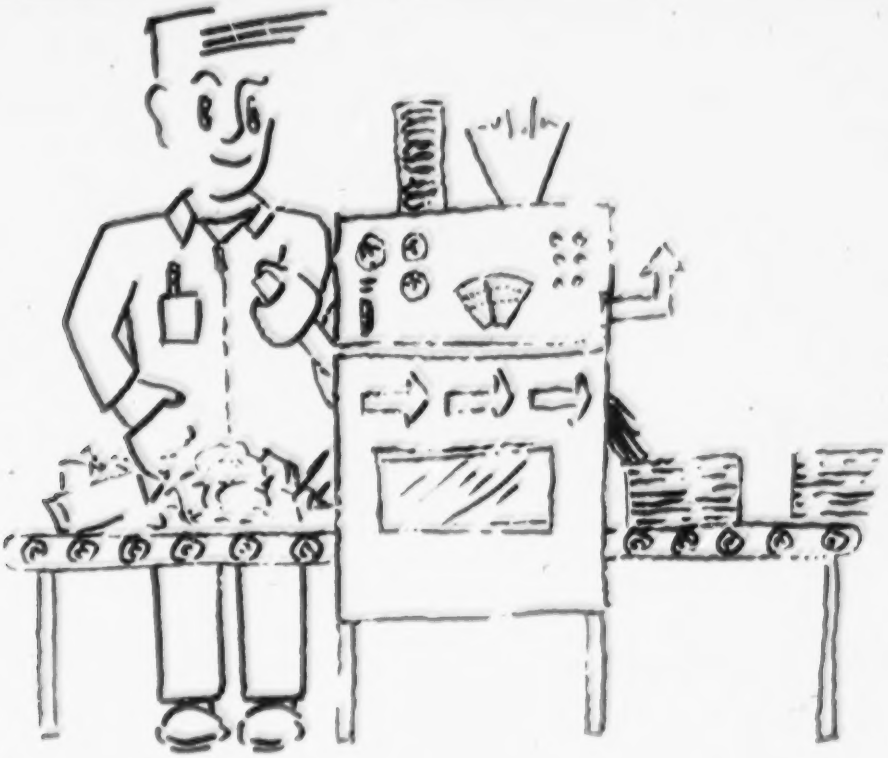
- How does the aquarium differ fron a sanitary landfill, as the regulations specify one should be operated?
- If the aquarium used potting soil rather than soil from the backyard, what activities would have been different? Why?
- What is happening to the organics? to the nonbiodegradable items? Which of these could have been recycled? What of the non-renewable resources are difficult to recycle? Why is this?
- What changes surprised you? What did not change, which you had anticipated would?



FOLLOW UP ACTIVITIES:

Take a field trip to the local landfill. Ask the landfill supervisor what made the location acceptable for the operation. How much longer a life span does the landfill have? What kinds of tests are run at the site regularly?

Start a school recycling drive for aluminum, or PET (polyethylene terephthalate - soda bottles) and/or HDPE (high density polyethylene - milk jugs), or paper.



Make It New Again!

OBJECTIVE: Students will recognize that new paper can be made from old.
SOL: Science 7.19

MATERIALS:

water
sink or large dish pans
blender
sheets of newsprint
metal mesh food strainer
2 pieces metal screen 12"x12"
rolling pin
electric iron
toweling
several 10"x15" press cloths

PROCEDURES:

Conduct the following paper making demonstration for your class.

Fill the blender about two-thirds full with warm water and add small pieces of newsprint, gradually, until the liquid is cloudy but not thick. About one 18"x 24" sheet is needed.

Pour the liquified pulp slowly over the entire surface of the food strainer, keeping the strainer over the sink. Turn the "new paper" out of the strainer onto the towel which has been placed on one of the pieces of screen. Put the other piece of screen on top of the "new paper."

Roll out excess moisture with a rolling pin. Remove the still wet paper from the screens carefully and place it on the press cloth. Put a second press cloth on top. On an appropriate flat surface, press the cotton and paper layers with a warm, dry iron. Move the paper occasionally to prevent sticking.

FURTHER ACTIVITIES:

The making of paper is essentially the same since its inception in 105 AD. Have students research the history of paper production, and report on the use of recycled paper in production of new paper.

Several paper making kits are readily available to the classroom teacher. One of the best may be gotten from the Chesapeake Corporation. You may request the kit from the Chesapeake West Point Operation, Post Office Box 311, West Point, Virginia 23181.

More Paper from Paper!

OBJECTIVE: Students will create new paper from old and understand that the use of this resource is not finite.
SOL: Science 11.9

MATERIALS:

A variety of uninked papers
blender

PROCEDURE

(Reprinted with permission from *Resource Recycling*, January/February, 1989, P. O. Box 10540, Portland, OR 97210, 503/227-1319.)

Paper can be made from any cellulose fiber. Cotton is the most common; others such as milkweed, okra and linen are used, particularly by artists for their special effects. To make recycled paper the class needs to have a collection of suitable - - that is, non-glossy, unprinted - papers.

Pulp small amounts of paper in a kitchen blender, using warm water and little pieces of paper mixed into a watery mass free of fiber clumps with a consistency of oatmeal.

Another technique which will make pulp in larger quantities is to use five gallon buckets filled slightly over half full. The paper pieces are blended with a special pulping attachment on an electric drill.

Pulp can be made and stored in buckets for some time before it is actually used.

Sheets can be formed in two ways. The first is the traditional dipping method. The wet pulp is poured into a vat or container. The thicker the pulp, the thicker the sheet of paper that will be formed.

The mould and deckle are the tools used to form the sheet. The mould consists of a wooden frame holding a screen. The deckle is another frame the same size, without the screen. The deckle is held on top of the mould, thereby forming the edge of the sheet of paper.

Dip the mould and deckle into the vat. Pull up and out of the vat allowing the water to go throught the screen leaving the pulp fibers on the screen. Remove the deckle and reveal the sheet of paper on the screen.

The second method of making paper involves the use of a high-sided deckle and and vat of water. The pulp is poured into the deckle and the mould and deckle are then dipped partially into the water, suspending the fibers in the water while keeping them still contained within the deckle. The new sheet is formed when the mould and deckle are pulled straight up and the deckle is removed from the mould.

Turn the mould upside down onto a damp felt. The new sheet will adhere to the felt, particularly if the excess water is sponged off the back of the screen.

Several drying options are available. A stack of paper sheets and felts can be built and put in a press. A rolling pin can squeeze water from a paper between two felts. Semi-dry paper can be air dried or placed between cotton press clothes and ironed with a warm iron.

Compost: There's Gold in that Garbage.

An average of about 20 percent of the municipal solid waste stream consists of yard wastes — grass clippings, twigs and branches, leaves, and stumps. Another 10 percent or so consists of food wastes. Landfilling these two categories means that they do not complete their life cycle; they may never biodegrade.

Compost is the result when bacteria and fungus organisms degrade kitchen, lawn and garden wastes. The resulting black crumbly humus is an excellent soil conditioner.

OBJECTIVE: Students will observe the transformation of vegetable waste into compost. SOL: Science 7.17

MATERIALS:

Stakes and wire to construct an enclosure about 4x4x2.
pitchfork
thermometer
assorted vegetable material
animal manure or high nitrogen content fertilizer
soil

PROCEDURE:

You will need about a cubic yard of material to generate good decomposition. Alternate layers of high nitrogen and high carbon materials will make for optimum conditions.

Students can bring in organic wastes which should include;

grass clippings
leaves
fruit and vegetable peelings
twigs, branches, bark chips, sawdust
coffee grounds
egg shells

Meat wastes should be avoided.

Alternate layers of the different materials approximately as follows:

three inch layer of coarse plant material
two inch layer of kitchen and garden refuse
one inch layer of fertilizer: can be manure, prepared garden fertilizer, or fresh grass cuttings.

Note: If you use the synthetic fertilizer, be sure that the preparation does not contain any weed killer.

one inch soil
repeat, using six inches plant material to one inch soil, until all materials are used.

Water pile to keep it moist but not soaking wet.

Within a few days, the pile should heat to about 160 degrees. The smaller the size of the materials used, the faster the pile will heat. If it does not heat up, the pile needs more water or more nitrogen. Turning the pile every week or so will also speed the process. Composting may be finished in one to two months if the materials have been shredded, kept moist, and turned frequently.

DISCUSSION

What causes the heat in the compost?

Why does the pile shrink in size as it composts?

What materials break down the fastest? slowest? Why?

What microbes are involved in the process of decomposition?

Can these be seen with a microscope? Is other animal life involved?

Are there any odors associated with this process? Why?

What does the finished compost smell like?

What is the texture of the finished compost?

What should you do with this material now? What is its use?

Why do composters avoid meat wastes?

FURTHER DISCUSSION

What happens to organic wastes when they go in the landfill?

Is the landfill a gigantic compost pile? Or do large amounts of organic wastes cause a problem in the landfill?

How is composting related to recycling?

How can composting reduce waste?

It's In The Bag!

Yard wastes average about 20 percent of the municipal solid waste stream. During the fall, when leaves are raked up and no longer burned, localities find that almost 50 percent of their waste stream is vegetable waste which is readily converted into a useful soil amendment.

OBJECTIVE: Students will observe and comprehend the changes in organic waste as it decomposes; they will define uses for the new material.
SOL: Science 10.7

MATERIALS:

Assorted dry organics, leaves, twigs and the like; wet organics such as vegetable peelings, coffee grounds and tea leaves, egg shells; soil; large plastic trash bags

PROCEDURE:

Organic wastes and soil are put into the plastic bags. About half of the volume of the material should be dry, 35 percent should be wet, and 15 percent, soil. Materials should be moist but not saturated. Put several air holes in the bag after it has been fastened securely. The bag should be turned daily for quicker decomposition. Composting will take about two weeks.

The contents of the bag will get quite warm. What causes this? What is its effect? When is the best time to turn the bag: when the temperature is rising, falling, or staying constant?

Observe which materials break down the quickest and which require more time. Ascertain some reasons for this. Also categorize some of the changes to the material. Is there odor associated with the process? What causes it?

What else might be added to your compost to assist the process? How do they function?

What should be done with the material after it is composted? What problems did any of the students encounter? Would the class as a whole recommend composting? Why or why not?

FOLLOW UP ACTIVITY

What is your community doing about yard wastes in its solid waste stream? Has anyone considered composting? What are some things that might be done with the community compost?

Simulation of a Local Waste Management Problem.

OBJECTIVE: Students will examine facts and make decisions based upon the information they have.
SOL: Social Studies 12.2

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You are the citizens and the Board of Supervisors of the County of Lovelyland, Virginia, population 50,000 and growing steadily at the rate of two to four percent each year. Your county runs the solid waste facility and landfill. A number of owners of attractive new industries have inquired about Lovelyland's current excellent labor force, the low tax rate, excellent schools, and available land for building and resources.

Your county administrator informs you the 450 acre county landfill will reach capacity within the next one to two years due to the increased use by the growing population. He also informs you that delays increase the cost of building a facility. The administrator would also like the board to increase collection fees from $8.00 a month to $15.00 to help slow down the volume of waste being sent to the landfill. Perhaps this action would buy time for the locality until the new one is finished. The administrator also suggests to the board to have some residents sort their trash. This would enable recycling plants to help eliminate some of their expenses in preparing materials for reuse.

The landfill operators have also informed you that a new series of EPA regulations have gone into effect. These new regulations prohibit the dumping of such items as car batteries, white goods (water heaters, refrigerators, etc.) with motors intact, and toxic substances from the waste generated from some of the existing and potential industries. You must provide for new facilities to handle the hazardous and non-hazardous waste. These new waste facilities will be rather expensive. Your siting committees have given you three possible choices. They are:

Site A is located within 1000 yards of the most luxurious part of the county.

Homes range in value in this area from $190,000 to $400,000. If this site is named, a number of people would be forced to relocate in order to meet the zoning ordinance. This site also has over 400 possible lots for new housing units to be constructed. Site A is rated as the most suitable for the landfill based on environmental concerns, including distance from the main water reservoir. Over 100 affluent families live here. Site A is approximately 600 acres in size.

Site B is located about two miles from the main residential parts

of the county.

Garbage trucks would have to go past the schools every day. This area is about four miles from your new industrial sites. The 550 acre site is mostly forest and undeveloped land. Approximately100 families live here. Most are small farmers and middle income people who have lived there for years. This site is rated second best. The site is near the schools.

Site C is a 700 acre tract of land near the small suburbs of the county.

Most of the 400 families living here are middle income wage earners. The site is marginally close to a stream which could be used to develop a lake resort area. Realtors and developers would like to get permission to develop this land for the potential lake area and for more middle income housing.

You must decide on a new landfill site at this meeting. It takes about six months to two years to receive certification for a landfill site.

The Chairman lives in site A and, along with the supervisor from B district, is up for re-election this year. Supervisors C, D, and E are up for re-election next year. Needless to say, there has been strong local opposition to each of these sites. You must also inform the people the costs of building these landfills will increase the tax rate at least 10 to 15 percent over the next two years unless some solutions can be reached.

This is the regularly scheduled meeting of the Board of Supervisors. Representatives from Sites A, B, and C are here to voice their protests of the potential landfill sites.

Representatives from the industries, the schools, the lake developers, and the realtors are all here to voice their views.

You are reminded by the county attorney that if you do not proceed with the naming of a site, you will be in violation of the law and each of you could be fined and/or jailed.

ROLES:

Teachers may wish to make variations. These are only suggestions.

A:
Board Chairman, has served on the Board 12 years;
wealthy owner of a private business;
married, no children;
conservative in tax views;
instrumental in attracting industry to area;
lives in Site A in the most expensive home in the county.

B:
former teacher, now a successful farmer;
environmentalist;
owns 100 acre farm;
five children in local schools;
completing first term in office;
announced candidates running against him;
has voted for tax increases when needed;
lives in site B

C:
common worker; a member of the board for seven years;
has two children, one in college, the other in high school;
owns a three bedroom ranch in site C;
has never voted for a tax increase, but believes in borrowing money and floating bonds;
knows most of his neighbors could not move if the site were in their area;
has sworn to keep the site out of his district if possible.

D:
is a land developer;
has served on school boards and planning commissions;
would like to develop site A;
has served for three years on the board;
has never voted for a tax hike;
favors a tax cut this year;

E:
tends to be liberal in everything;
has frequently voted for tax increases in schools, parks;
works as a journalist for a magazine;
married, no children;
concerned about the new industry coming in;
opposes incinerator (air pollution).

The Administrator
is very competent;
has warned the Board about their three year delay of the decision to select a site;
wants the industry, but wants the community preserved;
favors site A, but he has no vote;
advises in favor of an incinerator which will cost over $10,000,000 requiring an immediate 10% tax hike;
concerned about possible new restrictions to be put on new industries' wastes;
needs to secure a means to handle new EPA regulations.

Spokesperson for site A represents the wealthy property owners.

Spokesperson for site B represents the property owners and farmers of that area.

Spokesperson for site C represents the common people, middle class owners.

Spokesperson for the lake developers will mention:

- tourist attraction;
- land value increases;
- creation of at least 100 new jobs;
- cannot be built if landfill is in site C.

School and community representatives will mention a variety of concerns.

Taxpayers Association Representatives are against raising taxes for schools and landfills; oppose sorting laws and fee increases.

Notes

DEPARTMENT OF WASTE MANAGEMENT

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END

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